**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Class \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**[](http://www.google.com.au/imgres?imgurl=http://images.clipartof.com/small/33077-Clipart-Illustration-Of-A-Boy-Floating-In-Outer-Space-As-An-Astronaut.jpg&imgrefurl=http://www.clipartof.com/details/clipart/33077.html&usg=__y_Nb7ACC63zAMW14cddqvPJxAuU=&h=447&w=450&sz=105&hl=en&start=68&um=1&itbs=1&tbnid=ahFZnrsLQV7I2M:&tbnh=126&tbnw=127&prev=/images%3Fq%3Dmath%2Bclip%2Bart%2Bfree%26start%3D63%26tbnid%3DBh85TQjJz0D52M:%26tbnh%3D0%26tbnw%3D0%26um%3D1%26hl%3Den%26sa%3DN%26rlz%3D1T4GGLL_enAU353AU354%26imgtype%3Di_similar%26ndsp%3D21%26tbs%3Disch:1)**

**Scale Models Activity Sheet 3**

**Web Sites:**

<http://www.seds.org/nineplanets/nineplanets/>

<http://www.solarsystem.com/>

<http://dir.yahoo.com/Science/astronomy/>

With the data you collected, help Andy make a scale model drawing of the solar system.

1. First, you have to decide on your conversion factor. Ask yourself what factor you need to reduce the data by so that it will fit on poster board. Experiment with some different values for scales now.

If you are still having trouble, see your teacher for some suggestions. After you have chosen your conversion factor, fill in the table below to help scale down your data before you draw your solar system.

**Table Three: Conversion Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Planet | Actual Diameter  (km) | Scale\_\_\_\_\_\_  Size in cm | Actual Distance from the Sun  (km) | Scale\_\_\_\_\_\_  Distance in cm |
|  |  |  |  |  |
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|  |  |  |  |  |

1. After completing your table, what suggestions do you have for Andy so that he can make his scale model of the solar system fit onto a piece of poster paper?
2. After you have calculated the dimensions for your drawing, construct an accurate model on poster paper. Be sure to label each planet and indicate the scales you are using for size and distance.